

## ABSTRACT OF THE DISCLOSURE

In an optical bar-code reader, an optical scanner optically scans a bar code to obtain optical power of light reflected from white bars and black bars of the bar code, a differentiation unit calculates a differential 5 of the optical power to obtain a differential waveform, a dividing unit divides the differential waveform into a positive waveform and a negative waveform, a bar-code correcting unit calculates correct widths of black bars in the bar code from the positive waveform and the negative waveform to create corrected bar-code data, and a converter 10 converts the corrected bar-code data into character data that is an array of numerals and alphabets.